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ABSTRACT

For the first time, Asian and Pacific-Islander (API) eighth-grade students taking part in the California Assessment Program (CAP) were identified as belonging to one of the following 10 API ethnic groups: Asian-Indian, Cambodian, Chinese, Filipino, Hmong, Japanese, Korean, Laotian, Pacific-Islander, and Vietnamese. In school districts associated with Fresno, Los Angeles, San Francisco, Sacramento, San Diego, and San Jose Unified School Districts, 7,475 students classified themselves as Asian, Pacific Islander, or Filipino. However, because only 5,821 of these students further classified themselves into one of the 10 aforementioned API subgroups, all analyses are based on the latter sample. Strong relationships were found between performance on the CAP reading and written expression subtests and the following set of variables: (1) the generation in the United States to which they belong; (2) parents' education; (3) English fluency; and (4) hours spent on homework. Even when these variables were taken into account, there remained several large differences among and within ethnic groups on their performance in the different skill areas on the test. Results indicate that California API eighth graders are extremely diverse in their reading and written expression performance, a situation clearly related to variables such as ethnic-group membership, generation in the United States, English fluency, and skill area measured. Ten data tables are included. (TJH)

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**Reading and Written Expression Performance of
Ten Asian/Pacific-Islander Ethnic Groups on the Eighth Grade
California Assessment Program**

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Reading and Written Expression Performance of Ten Asian/Pacific-Islander Ethnic Groups on the Eighth-Grade California Assessment Program

Abstract

For the first time, Asian- and Pacific-Islander (API) eighth-grade students taking part in the California Assessment Program (CAP) were identified as belonging to one of ten API ethnic groups. Strong relationships were found between performance on the CAP Reading and Written Expression subtests and the following set of variables: (a) generation in the U.S., (b) parents' education, (c) English fluency, and (d) hours spent on homework. Even when these variables were taken into account, there remained several large differences among the ten API ethnic groups. Furthermore, there were substantial differences within particular ethnic groups on their performance in the different skill areas on the test. A discussion of possible, partial causes follows.

The California Assessment Program (CAP) is legislatively mandated to assess annually all third-, sixth-, eighth-, and twelfth-grade students in California. This state testing uses matrix sampling, a procedure in which each student takes a relatively small portion of a long test. Thus CAP is not designed to meet classroom needs for individual student diagnosis. Instead, scores for schools and districts are reported.

A statewide test has been annually administered to all eighth-grade public school students in California since 1984; however, it was not until 1988 that it was possible to analyze the data in terms of specific Asian and Pacific-Islander (API) ethnic (sub)groups. During 1988 special funding was obtained whereby it was possible to classify, on the CAP, students in the following ten API subgroups: Asian-Indian, Cambodian, Chinese, Filipino, Hmong, Japanese, Korean, Laotian, Pacific-Islander, and Vietnamese. Previously the classifications of "Asian," "Filipino," and "Pacific Islander" had been used to cover all API students.

The special funding also provided for an in-depth analysis of the data using these API subgroupings plus the variable of "which generation in the U.S." in addition to the normally used variables of sex, parents' education, English fluency, grade first enrolled in the current school, grade first enrolled in the current school district, hours spent reading for pleasure on a typical weekday, hours spent watching TV on a typical weekday, participation in specially funded programs, time spent doing homework outside of class each weekday, and number of reports and papers written during the last six weeks.

In this paper we present our findings on API students' performance on the Reading and Written Expression subtests, which consist of a science, social studies, or literary passage followed by a variety of vocabulary and comprehension questions with emphasis on higher-order thinking. These questions were followed by an essay, which was then followed by questions, each of which assessed written expression skills.

Method

Sample

In six California districts with large numbers of API students -- Fresno, Los Angeles, San Francisco, Sacramento, San Diego, and San Jose Unified School Districts--there were 7,475 students who classified themselves as "Asian," "Pacific Islander," or "Filipino." However, because only 5,821 of these students further classified themselves into one of the ten aforementioned API subgroups, all analyses except what is reported in Table 1 (Number of API eighth graders by district) are based on the latter sample size. Breakdowns in terms of district and ethnic group are shown in Tables 1 and 2.

Insert Tables 1 and 2 about here

Instrument

The California Assessment Program at the eighth-grade level uses 36 parallel 70-item forms covering 2,520 items. Each eighth grader is administered one of the forms (usually no two students get the same form in the same class), which contains 11 reading, 11 written expression, 13 mathematics, 20 history-social science, and 15 science items.

Scaled scores range from approximately 100 to 400 with state-level content area scores being assigned a value of 250 the first year a test is administered. The scaled scores allow comparisons from year to year, among content areas, and across grade levels.

Data Analysis

The CAP is designed for analysis via matrix sampling in which the various forms are combined to give overall (e.g., by school, district, or state) results that resemble the usual means, with accompanying standard deviations; however, the complexity of the procedure is such that tests of statistical significance are beyond the scope of this paper (Indeed several matrix-sampling experts cautioned us against trying to calculate significance tests).

According to Bock and Mislevy (1981, pg. 89), the CAP scaled-score methodology solves several problems that "hitherto were unresolved in theory and others that have never been implemented in large-scale assessment." Among the advances are the extension of item-response theory to multiple-matrix sampling, the application of assessment methods to multiple skill areas, and the stable estimation of scores from schools with small numbers of pupils.

The California State Department of Education has indicated that they regard a difference of 10 or more scaled scores points to be educationally significant for school results. The Department also has determined that a minimum of five students is needed for adequate reliability of mean scaled scores for Total Reading or Total Written Expression, and a minimum of 25 scores is needed to reliably estimate skill area scores. We used, as a guide to our analyses, a conservative version of these rules of thumb wherein we required that there be a minimum of 25 scores even for reporting total test score results.

We started the analysis by taking a broad-brush look at the results, without taking into account many of the background and demographic variables. These overall views of the data are seen as valuable in providing context to the study; for example, we found that knowing the differences in mean scaled scores across districts, ethnic groups, and generation in the U.S. was informative even though we knew that it was more meaningful to take into account variables such as parents' education. We then systematically included these other variables as we tried to account for the variation in mean performance. Because of the overwhelming number of analyses possible, we did not use all the variables available; nonetheless, we present extensive results with the idea that other researchers may come up with insights well beyond our "theorizing" about the findings.

Results

One-variable Analyses

As shown in Tables 3, 4, and 5, there are large differences among districts, ethnic groups, and groups classified on the basis of which generation they are in the U.S. The district differences are consistent with the research literature which indicates there is a strong link between socioeconomic status and student achievement (e.g., Loban's [1976] study of Oakland, California students in grades K-12). The differences across groups classified on the basis of which generation the students are in the U.S. are logically inextricably linked with the level of fluency in English.

Insert Tables 3, 4, & 5 about here

If the ten API ethnic subgroups are ranked in terms of overall performance, without taking other factors into account, the Japanese students would rank the highest, followed in decreasing order by the Korean, Asian-Indian, Filipino, Chinese, Vietnamese, Hmong, Pacific-Islander, Cambodian, and Laotian students. Rankings on the Reading and the Written Expression subtests would be similar.

Of particular interest is the performance of Filipino students who were close to the state mean on Reading and well above the state mean on Written Expression. This overall average-to-above-average performance in language arts is in contradistinction to the relatively low performance of Filipino students in Hawai'i (Brandon, 1987).

When all API groups were combined across the districts in the sample, there were more than twice as many first-generation students as there were students from all the other generations combined. This fact combined with the finding that the first-generation students had by far the lowest mean scaled scores on the Reading and Written Expression subtests indicates that the means of the non-first-generation students were well above the state reference mean of 250.

The generation with the highest mean scaled scores was the fourth generation; however, those means were based on a relatively small sample of 67 students. More interesting differences are revealed when the data are analyzed in terms of specific API ethnic subgroups.

Performance in the Skill Areas within Ethnic Groups

In order to investigate the degree to which there were differences within the various ethnic subgroups, we looked at performance in the major specific skill areas that together make up the larger areas of Total Reading and Total Written Expression. Because these skill area scores are based on a smaller number of test items than are the Total Reading and Written Expression scores, a minimum of 25 students is needed to ensure sufficient reliability of the mean scaled scores. The point of this analysis was not so much that there are specific differences within ethnic groups but rather that *performance on Total Reading and Total Written Expression may mask substantial differences in performance in the skill areas.*

There were interesting, often large, differences within ethnic subgroups; for example, the Chinese students in the sample scored notably higher (mean = 280) on Supporting Skills (e.g., standard English usage, punctuation, and spelling) than they did on Reading Comprehension (mean = 235). Japanese students on the other hand did best on Written Expression (mean = 330) and relatively (among themselves) the worst on Comprehension of Literature Passages (mean = 275). Likewise Korean students' mean on Comprehension of Science passages was 315, but their means on Vocabulary and Word Meaning were 275.

Asian-Indian students' performance was relatively the best among themselves on Comprehension of Social Studies Passages (mean = 330) and relatively the worst on Supporting Skills (mean = 265). Filipino students among themselves did best on Written Expression with a mean of 279 and worst on Word Meanings with a mean of 230.

Among the Vietnamese students, scores were highest on Supporting Skills (mean = 270) and lowest on Comprehension of Literature Passages (mean = 225). The Hmong students' strongest performance was on Supporting Skills (mean = 230); their biggest weakness was in Word Meanings (mean = 185). Pacific-Islander students were strongest on Supporting Skills (mean = 230) and weakest on Word Meanings (mean = 175).

Cambodian students were relatively strong in Comprehension Social Studies Passages (mean = 210) and relatively weak on Word Meanings (mean = 160). Laotian students were strongest in Written Expression (mean = 205) and weakest in Word Meanings (mean = 140).

When the performance within specific ethnic groups was analyzed, the relative strengths and weaknesses varied greatly among the groups. Some trends emerged, however. For example, six of the groups did relatively the worst on Word Meanings. Four of the groups did relatively the best and one group did relatively the worst on Supporting Skills. Three of the groups did relatively the worst on Literature Comprehension, and three groups did relatively the best on Written Expression.

Thus we see that not only do the different ethnic groups differ greatly overall in comparison to each other, but they also differ greatly within themselves with regard to their relative strengths and weaknesses.

Two-Variable Cross-Tabulational Analyses Involving Ethnicity and Other Variables

When we conducted cross-tabulations across two variables, the results got much more interesting; for example, when ethnicity was cross-tabulated with (a) sex, (b) parents' education, or (c) generation in the U.S., the variation accounted for was substantial. We also analyzed the data in terms of the total time spent on homework outside of class each weekday.

In order to ensure that only reasonably reliable data were included, subgroups containing fewer than 25 students were excluded from this part of the analysis. Note that this selection criterion is more conservative than the criterion of five or more students suggested by the California State Department of Education.

Ethnicity x Generation in the U.S.

The lowest means for all ethnic groups occurred with the first generation (see Table 6). Except for the Vietnamese students, there were notable gains from the first to the second generation. For some of the ethnic groups, gains of more than 100 scaled-score points were noted. For the Hmong, Laotian, and Cambodian groups of students, the sample sizes for second or later generations were smaller than 25 and thus too small to be included in the analyses.

Insert Table 6 about here

Among the groups with 25 or more in the second generation, Asian-Indian students had the highest means for reading (358) and writing (384); Korean students had the next highest means for both reading (348) and writing (356); and Pacific-Islander students had the lowest means for reading (206) and writing (241).

Perhaps of more use pedagogically are the results involving the first generation. Here we see that the Korean students were the highest scoring first-generation group in Reading and Written Expression. The next highest scoring first-generation group on reading was the Asian-Indian group followed by the Vietnamese. On the Written Expression test the second and third highest scoring first-generation groups were the Filipinos and the Vietnamese, followed closely by the Japanese.

Finally we see that the lowest scoring first-generation groups on Reading were the Laotian students and Pacific-Islander students. Also scoring below 200 were the first-generation Cambodian students. On the Written Expression test Pacific Islanders and Cambodians were the lowest scoring first-generation groups.

A more refined analysis that included the variables of fluency in English, parents' education, and amount of time spent on homework each weekday showed, with a few notable exceptions, the expected strong, positive relationship between those variables and the test scores. In the following section we present some of the noteworthy exceptions.

Ethnicity x Fluency in English: Noteworthy Exceptions.

As shown in Table 7, except for the Vietnamese students, the groups of students who spoke "English only" scored the highest on Reading and Written Expression. The mean Total Reading score, however, of Vietnamese eighth grader students who spoke "English only" was 36 points lower than the mean of those Vietnamese eighth graders whose primary language was other than English but who also spoke fluent English.

Insert Table 7 about here

Ethnicity x Parents' Education: Noteworthy Exceptions.

Again Vietnamese students' mean scores were interesting and somewhat unexpected--those whose parents had a high school education or some college actually had slightly higher mean Total Reading scaled scores than did the Vietnamese students whose parents were college graduates or had advanced college degrees (see Table 8). Another rather strong, unexpected finding was the clearly higher performance of Pacific-Islander students whose parents had some college versus the performance of Pacific-Islander students whose parents were college graduates or had advanced college degrees.

Insert Table 8 about here

Ethnicity x Time Spent on Homework: Noteworthy Exceptions .

Again the Vietnamese students' scores showed a pattern somewhat different from the general trend--those Vietnamese students who spent less than one hour per day on homework had mean Total Reading scores that were about the same as those Vietnamese students who spent one or more but less than two hours on homework (see Table 9).

Insert Table 9 about here

Showing even stronger discrepancies were Hmong and Laotian students, wherein those spending less than one hour on homework clearly outscored those spending between and one and two hours. Even the Laotian students spending two hours or more on homework had a lower mean score than did the Laotian group spending less than one hour.

Three-way Cross-tabulation: Ethnicity x Generation x Parent Education

Finally we look at the data in terms of what we regard as three of the most salient variables: ethnicity, generation in the U.S., and parents' education. When all the API subgroups are combined, there is only one exception to the trend that within the five-generation grouping, the higher the parents' education, the higher the Reading and Written Expression scaled scores (see Table 10). That exception occurred for third generation API students wherein those whose parents had some college education had a mean Reading score that was 39 points higher than the group whose parents had a college degree. The group whose parents had some college also equaled the Reading performance of the group whose parents had advanced degrees.

Insert Table 10 about here

Next we present for each of the specific API subgroups those areas where they showed *exceptions* to the general trend cited above:

Chinese: For first-generation and second-generation students, those with parents who had some college did about the same on the Reading test as those whose parents were college graduates.

Japanese: For first- and third-generation students, eighth graders of college graduate parents did less well on the Reading test than did eighth graders of parents with some college.

Korean: For first-generation students, those whose parents had some college did about the same on the Reading and the Written Expression tests as those whose parents had a high school education and those whose parents had less than a high school education.

Vietnamese: For first-generation students whose parents had at least a high school education, there was an inverse relation between mean Reading scores and parents' education and no discernible relationship for the Written Expression test.

Hmong: First-generation students whose parents had a high school education did about the same on the Reading and Written Expression test as did the students whose parents had some college.

Laotian: First-generation students whose parents had less than a high school education (1) did better on the Reading and Written Expression than did those whose parents had a high school education, and (2) did better on Written Expression than did the group whose parents had some college.

Cambodian: Most parents had less than a high school education. The numbers of parents in the other categories were too small to enable us to make any comparisons.

Asian Indian: Small numbers of students precluded our making any comparisons.

Pacific Islander: There was little relationship between parents' education (in the high school to college graduate range) and students' performance.

Filipino: Second-generation students whose parents had at least a college degree scored definitely higher on Reading and Written Expression than did the rest of the students. The students whose parents had less than a high school education scored notably higher than did the students whose parents had a high school education.

Discussion

This study verified emphatically that California API eighth-grade students are extremely diverse in their Reading and Written Expression performance, which is clearly related to variables such as ethnic-group membership, generation in the U.S., English fluency, and which skill area is being measured. So diverse were the mean performances that we suggest that writers who use phrases such as the "performance of Asian (or Asian-American) students was..." are probably guilty of unwarranted stereotyping. Furthermore, we suggest that it is even generally inappropriate to refer to the "achievement of Chinese-American (non-immigrant) students," for example, without taking into account factors such as generation in the U.S., parents' education, or amount of time spent on homework each weekday.

It would be naive of us to try to explain in detail our findings in terms of solid theoretical underpinnings. Instead we take a more humble tack akin to the "fourth generation evaluation"

approach advocated by Guba and Lincoln (1989), who argue that rather than try to come up with definitive conclusions and recommendations, we should strive to produce an agenda for negotiation of claims, concerns, and issues.

We offer the following comments and observations that we feel are worthy of being included in this "negotiation agenda":

- Immigrants from Asia and the Pacific are operating out of different identity systems that are in conflict more often than they overlap (e.g., API, American, adolescent, and maybe refugee) [Ascher, 1989]. The relatively lower performance of first-generation students from Southeast Asia, with the possible exception of Vietnam, is consistent with this observation. Another possibly important factor for which we do not have good data is whether immigrants and their families came to the U.S. because they wanted to or whether they were in the U.S. largely because they had been forced to leave their native country.
- The relatively unusual patterns shown by Vietnamese eighth graders' scores may in part be related to complex, confounding factors such as (a) at the time of these students' births, Vietnam was still war ridden, and many South Vietnamese became refugees; (b) English had to be mixed into a multi-lingual environment which often included Vietnamese, French, and a Chinese dialect such as Cantonese; and (c) in comparison to Chinese, Filipino, Japanese, Asian-Indian, and Korean adults 25 years or older in 1980, the Vietnamese had the lowest levels of education (Hsia, 1988).
- Many Pacific Islanders come from a society that is much more oral based and much less written based than is American society or many Asian societies. We note the relatively low performance of Pacific-Islander students while reminding ourselves that we too may be guilty of inappropriately using a single term to describe what are probably very diverse students (the Pacific Islander group was not identified more specifically but likely included students from such diverse ethnic groups as Hawaiians, Samoans, Guamanians, Micronesians, etc.). Related to this issue is the fact that the Hmong culture is a preliterate one, and a number of the immigrants come from "mountain people" cultures in which formal education, similar to what is found in the U.S., is non-existent.

- For first generation students, there are innumerable different factors that can affect their school achievement: **pre-immigration** factors such as class status and cultural values; **migration** factors such as escape and camp experiences; and **post-migration** factors such as differentness of new environment and reception of host community (Nidorf, 1985). The extent to which these factors differ among the ten API subgroups in this study would likely be related to the differences found in performance on the CAP.
- The term "Filipino" can be too general. Tagalog speakers tend to come from the cities, but Ilokano speakers tend to come from the country. This distinction may help explain in part the discrepancies between Filipinos' performances in California versus in Hawai'i. Also in the Philippines, the education system is similar to the American system; furthermore, Filipinos are the only Asian group in which women were more highly educated than the men (Hsia, 1988).
- In the 1980 U.S. Census, Asian-Indian adults had the highest median years of schooling, an astounding 16.1 years. This high level of education of Asian-Indian adults partly "accounts for" the relatively high performance of Asian-Indian eighth grade students in our study.
- Although U.S. Census data from 1979 (Hsia, 1988) show that the median family income of Koreans was lower than that of Japanese, Chinese, Filipinos, and Asian Indians, there is some evidence that today Koreans have one of the highest per capita incomes of any ethnic group. In part this is due to the widespread increase in businesses run by Koreans in America. Related to this relatively high income level is the relatively high mean scores of Korean eighth grade students.
- We do not have good information regarding the degree to which the demographic questions were validly and reliably answered by the students from the different API subgroups. To the extent that the concepts of variables such as "generation in the U.S." and "parents' education" were not equally understood by the different students, some of the findings need to be viewed with some skepticism; however, we are confident that this CAP data set is technically one of the best ones available.
- The tremendous amount of diversity that we found among API eighth graders has serious pedagogical implications. It would be an overwhelming task to design teaching strategies and curricula that are universally harmonious with the observed differences. Perhaps a more

reasonable approach would be to conduct research regarding which types of strategies can be successfully used in dealing with diverse API students and which types are unlikely to be successful in addressing diverse API students.

- Finally we accept our limitations in making the best sense of these data as we invite others to help us gain a better understanding of this unique, important data set.

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Table 1. Number of Asian/Pacific Islander 8th Graders by District.

District	N	%
Fresno Unified	568	8%
Los Angeles Unified	3237	43%
Sacramento City Unified	515	7%
San Diego City Unified	1211	16%
San Francisco Unified	1722	23%
San Jose Unified	222	3%

Table 2. Number of 8th Grade Students by Asian/Pacific Islander Subgroup.

Ethnicity	N	%
Chinese	1843	32%
Japanese	229	4%
Korean	449	8%
Vietnamese	600	10%
Hmong	231	4%
Laotian	178	3%
Cambodian	113	2%
Asian Indian	81	1%
Pacific Islander	357	6%
Filipino	1740	30%

Table 3. Total Scaled Scores for Asian/Pacific Islander Students by District.

District	N Students	Scaled Score	
		Reading	Written Expression
Fresno Unified	568	212	239
Los Angeles Unified	3237	257	278
Sacramento City Unified	515	228	263
San Diego City Unified	1211	254	288
San Francisco Unified	1722	222	258
San Jose Unified	222	299	320

Table 4. Total Scaled Scores by Asian/Pacific Islander Subgroup.

Ethnicity	N Students	Scaled Score	
		Reading	Written Expression
Chinese	1843	239	272
Japanese	229	294	330
Korean	449	292	307
Vietnamese	600	234	261
Hmong	231	208	225
Laotian	178	165	205
Cambodian	113	183	204
Asian Indian	81	291	300
Pacific Islander	357	196	224
Filipino	1740	246	279

Table 5. Total Scaled Scores for Asian/Pacific Islander Students by Generation in the U.S.

Generation	N Students	Scaled Score	
		Reading	Written Expression
First Generation	3569	223	250
Second Generation	1399	291	320
Third Generation	153	272	303
Fourth Generation	67	334	346
Fifth Generation	43	251	268

Table 6. Total Scaled Scores by Asian/Pacific Islander Subgroup and Generation in the U.S.

Ethnicity	Generation	N Students	Scaled Score	
			Reading	Written Expression
Chinese	First Generation	1306	217	247
	Second Generation	445	312	348
	Third Generation	39	304	318
	Fourth Generation	15	321	321
	Fifth Generation	12	231	254
Japanese	First Generation	48	205	259
	Second Generation	85	303	339
	Third Generation	51	325	360
	Fourth Generation	32	400	400
	Fifth Generation	2	.	.
Korean	First Generation	327	279	293
	Second Generation	109	348	356
	Third Generation	2	.	.
	Fourth Generation	3	.	.
	Fifth Generation	3	.	.
Vietnamese	First Generation	538	236	262
	Second Generation	37	235	244
	Third Generation	3	.	.
	Fifth Generation	5	221	236
Hmong	First Generation	194	201	222
	Second Generation	12	291	272
	Third Generation	1	.	.
Laotian	First Generation	164	161	204
	Second Generation	4	.	.
	Third Generation	1	.	.
Cambodian	First Generation	105	180	199
	Second Generation	3	.	.
Asian Indian	First Generation	39	245	241
	Second Generation	38	358	384
	Fourth Generation	1	.	.
	Fifth Generation	2	.	.

Table 6. Total Scaled Scores by Asian/Pacific Islander Subgroup and Generation in the U.S. (Cont.).

Ethnicity	Generation	N Students	Scaled Score	
			Reading	Written Expression
Pacific Islander	First Generation	53	166	189
	Second Generation	89	206	241
	Third Generation	24	137	207
	Fourth Generation	9	242	273
	Fifth Generation	7	231	275
Filipino	First Generation	644	229	268
	Second Generation	499	276	304
	Third Generation	28	283	305
	Fourth Generation	6	266	276
	Fifth Generation	9	323	287

Table 7. Total Scaled Scores by Asian/Pacific Islander Subgroup and English Fluency.

Ethnicity	English Fluency	N Students	Scaled Score	
			Reading	Written Expression
Chinese	English Only	252	307	332
	Fluent English	1069	284	318
	Limited English	517	135	166
Japanese	English Only	134	326	354
	Fluent English	76	288	324
	Limited English	16	104	170
Korean	English Only	84	342	337
	Fluent English	299	312	328
	Limited English	64	171	189
Vietnamese	English Only	42	242	300
	Fluent English	389	278	298
	Limited English	163	148	166
	Non-English	1	.	.
Hmong	English Only	2	.	.
	Fluent English	99	251	266
	Limited English	126	178	196
	Non-English	2	.	.
Laotian	English Only	6	214	248
	Fluent English	69	196	243
	Limited English	98	143	173
	Non-English	3	.	.
Cambodian	English Only	1	.	.
	Fluent English	50	231	248
	Limited English	61	142	162
Asian Indian	English Only	29	383	337
	Fluent English	43	279	311
	Limited English	8	128	156
Pacific Islander	English Only	233	223	239
	Fluent English	100	159	209
	Limited English	19	100	100
Filipino	English Only	741	268	297
	Fluent English	825	252	287
	Limited English	150	129	181
	Non-English	1	.	.

Table 8. Total Scaled Scores by Asian/Pacific Islander Subgroup and Parent's Education.

Ethnicity	Parent's Education	N Students	Scaled Score	
			Reading	Written Expression
Chinese	Advanced Degree	116	368	395
	College Graduate	287	279	314
	Some College	248	282	300
	High School	420	238	269
	Less than High School	705	198	235
Japanese	Advanced Degree	37	317	381
	College Graduate	100	320	346
	Some College	47	303	343
	High School	25	215	258
	Less than High School	10	161	204
Korean	Advanced Degree	79	362	349
	College Graduate	199	287	315
	Some College	67	278	285
	High School	76	269	274
	Less than High School	20	252	273
Vietnamese	Advanced Degree	34	234	272
	College Graduate	129	239	267
	Some College	94	249	271
	High School	123	245	259
	Less than High School	189	213	239
Hmong	Advanced Degree	6	331	393
	College Graduate	6	161	241
	Some College	20	228	241
	High School	13	208	235
	Less than High School	181	202	218
Laotian	Advanced Degree	7	190	224
	College Graduate	14	200	241
	Some College	22	173	176
	High School	31	147	202
	Less than High School	98	159	209
Cambodian	Advanced Degree	5	231	278
	College Graduate	13	190	211
	Some College	10	252	241
	High School	8	257	268
	Less than High School	74	166	187

Table 8. Total Scaled Scores by Asian/Pacific Islander Subgroup and Parent's Education (Cont.).

Ethnicity	Parent's Education	N Students	Scaled Score	
			Reading	Written Expression
Asian Indian	Advanced Degree	32	364	360
	College Graduate	21	320	311
	Some College	10	298	258
	High School	9	178	238
	Less than High School	7	158	187
Pacific Islander	Advanced Degree	32	236	246
	College Graduate	91	210	239
	Some College	75	217	267
	High School	113	182	205
	Less than High School	28	128	159
Filipino	Advanced Degree	206	268	299
	College Graduate	803	258	295
	Some College	282	252	276
	High School	285	216	253
	Less than High School	92	186	234

Table 9. Total Scaled Scores by Asian/Pacific Islander Subgroup and Time Spent on Homework.

Ethnicity	Time On Homework	N Students	Scaled Score	
			Reading	Written Expression
Chinese	None	23	197	210
	Less than 1 hour	357	219	252
	1 Hour or more, Less than 2	798	231	264
	2 Hours or more	656	263	297
Japanese	None	2	.	.
	Less than 1 hour	44	256	310
	1 Hour or more, Less than 2	108	287	322
	2 Hours or more	72	338	354
Korean	None	1	.	.
	Less than 1 hour	69	240	289
	1 Hour or more, Less than 2	204	281	292
	2 Hours or more	170	335	338
Vietnamese	None	10	193	227
	Less than 1 hour	107	224	243
	1 Hour or more, Less than 2	221	226	248
	2 Hours or more	260	249	273
Hmong	None	6	100	175
	Less than 1 hour	59	206	206
	1 Hour or more, Less than 2	94	187	227
	2 Hours or more	71	245	244
Laotian	None	5	211	218
	Less than 1 hour	42	173	214
	1 Hour or more, Less than 2	70	158	190
	2 Hours or more	59	164	214
Cambodian	None	1	.	.
	Less than 1 hour	30	131	145
	1 Hour or more, Less than 2	41	180	217
	2 Hours or more	40	223	233
Asian Indian	Less than 1 hour	11	205	210
	1 Hour or more, Less than 2	34	301	308
	2 Hours or more	35	313	325

Table 9. Total Scaled Scores by Asian/Pacific Islander Subgroup and Time Spent on Homework (Cont.).

Ethnicity	Time On Homework	N Students	Scaled Score	
			Reading	Written Expression
Pacific Islander	None	9	194	238
	Less than 1 hour	90	176	219
	1 Hour or more, Less than 2	173	189	219
	2 Hours or more	79	235	246
Filipino	None	27	209	228
	Less than 1 hour	348	216	255
	1 Hour or more, Less than 2	810	249	278
	2 Hours or more	539	265	302

Table 10. Total Scaled Scores for Asian/Pacific Islander Students by Generation in the U.S. and Parents' Education.

Generation	Parents' Education	N Students	Scaled Score	
			Reading	Written Expression
.	Advanced Degree	329	304	322
	College Graduate	695	264	294
	Some College	326	259	286
	High School	430	225	246
	Less than High School	379	192	227
1	Advanced Degree	253	278	298
	College Graduate	837	246	274
	Some College	447	243	264
	High School	691	222	250
	Less than High School	1224	191	225
2	Advanced Degree	203	351	374
	College Graduate	492	299	339
	Some College	280	290	316
	High School	239	261	292
	Less than High School	129	249	282
3	Advanced Degree	28	323	369
	College Graduate	50	284	342
	Some College	35	323	298
	High School	28	195	236
	Less than High School	6	108	134
4	Advanced Degree	6	400	400
	College Graduate	37	368	350
	Some College	17	269	327
	High School	4	.	.
	Less than High School	1	.	.
5	Advanced Degree	3	389	378
	College Graduate	13	327	302
	Some College	6	214	226
	High School	13	215	265
	Less than High School	6	176	218